



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/936,492	09/11/2001	David John Hollick	B&H011US5487	7155

7590 03/10/2003

Marguerite Gerstner
Tyco Electronics Corporation
307 Constitution Drive MS R20 2B
Menlo Park, CA 94025-1164

EXAMINER

LEON, EDWIN A

ART UNIT	PAPER NUMBER
----------	--------------

2833

DATE MAILED: 03/10/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/936,492

Applicant(s)

HOLLICK, DAVID JOHN

Examiner

Edwin A. León

Art Unit

2833

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 December 2002.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 and 9-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 9-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. Applicant's amendment filed December 26, 2003 in which Claims 1, 3, 9, 11, 15-16, 21 and 23 have been amended, Claim 7 has been cancelled and new Claims 24-27 have been added, has been placed of record in the file as Paper No. 9.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1, 6, 13-14, 17, 20-22 and 24-27 rejected under 35 U.S.C. 102(e) as being anticipated by Tsou (U.S. Patent No. 6,109,984). With regard to Claims 1, 13-14, 17, 20-22 and 24-27, Tsou discloses an electrical connector (Fig. 3) comprising a connector body (58) including a tubular socket (58) configured to receive an electrical conductor (70), clamping means (Column 5, Lines 3-5) arranged to secure the electrical conductor (70) within the socket (58), and a tubular socket insert (12) and fitting within

Art Unit: 2833

the tubular socket (58) so as to reduce the effective size of the socket (58) and the socket insert (12) having a diameter selected to reduce an effective diameter of the socket (58) to reduce eccentricity of positioning of the electrical conductor (70) within the electrical connector (Fig. 3), the clamping means (Column 5, Lines 3-5) comprising at least one clamping bolt (Column 5, Lines 3-5) held in respective threaded bores (62) in the connector body (58) such that the at least one clamping bolt (Column 5, Lines 3-5) extends into the socket (58) so as to clamp, via the socket insert (12) and the electrical conductor (70) is received within the tubular socket (58) insert to position the socket insert (12) between the clamping member (40) and the electrical connector (Fig. 3) and between an opposing surface of the socket (58) relative to the clamping member (40) and the electrical conductor (70). See Figs. 3-5.

With regard to Claim 6, Tsou discloses the socket (58) being a bore (60) of substantially circular cross-section. See Figs. 3-5.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsou (U.S. Patent No. 6,109,984) in view of Dupont (U.S. Patent No. 5,630,737). With

Art Unit: 2833

regard to Claims 2 and 19, Tsou discloses the claimed invention except the socket insert being aluminum.

Dupont discloses a socket (1) made of aluminum. See Fig. 1, and Column 3, Lines 9-16.

Thus, it would have been obvious to one with ordinary skill in the art to modify the connector of Tsou by using aluminum to make the socket insert as taught in Dupont in order to improve the electrical conductivity of the insert.

6. Claims 3-4, 9-12, 15-16, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsou (U.S. Patent No. 6,109,984) in view of Pranch (U.S. Patent No. 4,687,273). With regard to Claims 3-4, 9, 11-12, 15-16, and 23, Tsou discloses the claimed invention except for the insert having a castellated or a corrugated profile on an outside surface.

Pranch discloses a connector having socket insert (2) having a castellated or corrugated profile (4) on an outside surface. See Fig. 1.

Thus, it would have been obvious to one with ordinary skill in the art to modify the connector of Tsou by including a castellated or corrugated profile on an outside surface of the socket insert as taught in Pranch to improve the mechanical strength of the retaining engagement between the connector and the insert.

With regard to Claim 10, the combination of Tsou and Pranch disclose the claimed invention except the socket insert being aluminum.

It would have been obvious to one with ordinary skill in the art at the time the invention was made to make the socket insert of aluminum, since it has been held to be

within the general ordinary skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

7. Claims 5 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsou (U.S. Patent No. 6,109,984) in view of Lamome (U.S. Patent No. 5,422,438). With regard to Claims 5 and 18, Tsou discloses the claimed invention except for the insert having an internal surface having a castellated or a corrugated profile.

Lamome discloses a connector having an insert with an internal surface of the tubular socket insert (3) having a castellated or a corrugated profile (8). See Figs. 1-2

Thus, it would have been obvious to one with ordinary skill in the art to modify the connector of Tsou by including a castellated or corrugated profile on an inside surface of the socket insert as taught in Lamome to improve the mechanical strength of the retaining engagement between the conductor and the insert.

8. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tsou (U.S. Patent No. 6,109,984) in view of Polidori (U.S. Patent No. 5,320,565). Tsou discloses the claimed invention except at least one clamping bolt including a shearable head that shears off when a torque applied to the shearable head exceeds a predetermined value.

Polidori discloses a connector (10) having at least one clamping bolt (46) including a shearable head (45) that shears off when a torque applied to the shearable head (45) exceeds a predetermined value. See Fig. 4 and Column 38-47.

Thus, it would have been obvious to one with ordinary skill in the art to modify the connector of Tsou by including at least one clamping bolt including a shearable head that shears off when a torque applied to the shearable head exceeds a predetermined value as taught in Polidori to prevent over torquing.

Response to Arguments

9. Applicant's arguments with respect to claims 1-7 and 9-27 have been considered but are moot in view of the new ground(s) of rejection.

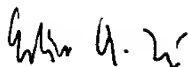
Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edwin A. León whose telephone number is (703) 308-6253. The examiner can normally be reached on Monday - Friday 9:00-5:30.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paula A. Bradley can be reached on (703) 308-2319. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7722 for After Final communications.

Art Unit: 2833

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.



Edwin A. Leon
AU 2833



P. AUSTIN BRADLEY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800

EAL
March 3, 2003